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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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45473	7590	10/16/2006	EXAMINER	
HUTCHISON LAW GROUP PLLC			CHOI, FRANK I	
PO BOX 31686			ART UNIT	
RALEIGH, NC 27612			PAPER NUMBER	

1616

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/919,877	JONN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Frank I. Choi	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 74-93 and 95-102 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 74-93, 95-102 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 89-91 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention as follows: the claims indicate that the composition contains at least one additive but then indicates that the amount of the additive can be “up to” the claimed amount which renders the claim ambiguous. Applicant’s reliance on In re Kirsch is misplaced that case the Examiner argued that the absence of an ingredient would terminate the reaction. In this case, the absence of the ingredient would not render the claimed composition inoperable. The limitation “up to” includes zero as the lower limit. In re Mochel, 176 USPQ 194, 195 (CCPA 1972). As such, the amendment from “0” to “up to” does not change the fact that the claim still requires the presence of an ingredient and then indicates that it contains 0% of the ingredient.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 74-93. 95-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (US Pat. 5,981,621) in view of Kronenthal et al. (US Pat. 3,995,641), Hammerslag (US Pat. 6,386,203) and EP 0 965 623.

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Clark et al. teach a composition comprising at least two different monomers which form a medically acceptable polymer, at least one plasticizer and a mixture of anionic and radical stabilizers, such as sulfur dioxide, hydroquinone, p-methoxyphenol and butylated hydroxyanisole (Column 2, lines 63-68, Columns 3-6, Claims 1, 7). It is taught that in applying the composition a polymerization initiator, such as benzalkonium chloride, is used and may be readily selected by one of ordinary skill in the art without undue experimentation (Column 11, lines 18-68). Examples of suitable monomers include 2-octyl cyanoacrylate, 2-isopropoxyethyl cyanoacrylate and alpha-cyanoacrylates disclosed in US Pat. 3,995,641 to Kronenthal et al. (Column 4, lines 7-68, Column 5, lines 1-65)

Kronenthal et al. teaches carbalkoxyalkyl 2- cyanoacrylates which are readily assimilated by tissues and exhibit a relatively low degree of inflammatory tissue response (column 1, lines 60-68, Column 2, lines 1-11). It is disclosed that carbalkoxyalkyl 2-cyanoacrylates (0%, 25%, 17%, 26% polymer remaining after 16 weeks) biodegraded at a faster rate than isobutyl 2-cyanoacrylate (82% remaining after 16 weeks) (Column 13, lines 1-30).

Hammerslag teaches that polymerizable cyanoacrylates can be co-polymerized with other compounds that alter elasticity, modify viscosity and aid in biodegradation (Column 5, lines 21-33). It is taught that suitable cyanoacrylates can be chosen from methyl, ethyl, butyl, methoxypropyl, alkoxyalkyl, and carbalkoxyalkyl depending on acceptable toxicity and other properties for a given application (Column 5, lines 54-67). It is taught that there is a wide variation in the rates of biodegradation of cyanoacrylates but generally polymers of cyanoacrylates which have substituents that are small and/or contain one or more oxygen-containing functional groups appear to have increased biodegradability rates whereas

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cyanoacrylates having long chain alkyl groups lacking in oxygen-containing functional groups as substituents tend to form polymers which biodegrade more slowly (Column 6, lines 33-45). It is taught that one of ordinary skill in the art would be able to by routine experimentation choose a cyanoacrylate with suitable biodegradation characteristics (Column 6, lines 49-56).

EP 0 965 623 teaches the combination of sulfuric acid and sulfur dioxide with free radical stabilizers for use in cyanoacrylate compositions to stabilize and enhance the shelf-life of said composition (Pg.4, lines 5-35, Pg. 5, lines 33-51). It is taught that suitable cyanoacrylates include 2-octyl cyanocrylate, 2-isopropoxyethyl cyanoacrylate and alpha-cyanoacrylates disclosed in US Pat. 3,995,641 to Kronenthal et al. (Pg. 9, Pg. 10, lines 1-28).

The prior art discloses a composition comprising at least two different monomers which form a medically acceptable polymer, at least one plasticizer, a mixture of anionic and radical stabilizers, such as sulfur dioxide, hydroquinone, p-methoxyphenol and butylated hydroxyanisole, a polymerization initiator, such as benzalkonium chloride. The difference between the prior art and the claimed invention is that the prior art does not expressly disclose a composition or film having a first monomer, which includes alkyl ester cyanoacrylate, and a different second monomer where the absorption rate of the first monomer species is different from the absorption rate of the second monomer species. However, the prior art amply suggests the same as the prior art discloses the combination of different monomers in forming medical adhesives. Further, it would have been well within the skill of and one of ordinary skill in the art would have been motivated to combine an alkyl ester cyanoacrylate with a different cyanoacrylate, such as an octyl 2-cyanoacrylate or alkylether cyanoacrylate, with the expectation that biodegradation of the composition could be adjusted readily by modifying the ratio of the

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monomers and the composition would have a low degree of inflammatory response. Further, one of ordinary skill in the art would have been motivated to combine sulfur dioxide and sulfuric acid with radical stabilizers such as hydroquinone, p-methoxyphenol and butylated hydroxyanisole with the expectation that the composition would be more stable. Finally, one of ordinary skill in the art would have been motivated to use benzalkonium chloride with the expectation that it would act as a polymerization initiator.

Examiner has duly considered Applicant's arguments but deems them unpersuasive for the reasons set forth in the prior Office Actions and the further reasons below.

Contrary to Applicant's arguments Clark et al. as indicated above does disclose the use of an alkyl ester and alkyl alpha cyanoacrylate as it specifically incorporates by reference the US Patent, Kronenthal et al., and identifies the use of 2-octyl cyanoacrylate which is an alkyl alpha cyanoacrylate.

With respect to Kronenthal et al., it immaterial what Kronenthal et al. does and does not disclose as the rejection herein is based on a combination of references. The applicant does not refute the fact that Kronenthal et al. discloses the use of alkyl ester acrylates and that they biodegrade faster than the alpha alkyl cyanoacrylate isobutyl 2-cyanoacrylate. Kronenthal must be read in view of Clark et al. which does discloses combinations of different cyanoacrylate monomers as well as the other references.

With respect to Hammerslag, a patent reference is prior art for all that it discloses. The fact the examples are related to other types of polymers does not teach away from the general disclosure that a given cyanoacrylate can be mixed with other substances to adjust biodegradation rates. There is nothing in Hammerslag that precludes another cyanocrylate from

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being said substance. Again, since Clark et al. does disclose the combination of different cyanoacrylate monomers is immaterial that Hammerslag does not explicitly disclose that the substance can be a cyanoacrylate monomer.

With respect to EP 965 623, again, the Examiner has set forth the basis for citing to said reference as indicated above. What said reference may or may not otherwise disclose is again immaterial as the rejection herein is based on a combination of references.

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). As such, the Applicant's arguments as to what the references teach or do not teach individually does not overcome the rejection since as indicated above the rejection is based on a combination of references.

Contrary to the Applicant's arguments, as indicated above, Clark et al. does suggest the combination of alkyl ester cyanoacrylate and alkyl alpha cyanoacrylate. Clark just does suggest the Applicant's claimed reason for combining the same. The references in combination suggest the selecting the claimed monomers and the reasoning to do so, i.e. Kronenthal suggests that alkyl ester cyanocrylates are more biodegradable than alkyl alpha acrylates having chains at least as long as isobutyl, one of ordinary skill in the art reading Hammerslag in view of

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Kronenthal and Clark et al. would expect that the substance which can be used to obtain desired biodegradation rates can be another cyanoacrylate, and Ep'623 is not limited to the cyanoacrylate listed as it cites to Kronenthal. As such, contrary to the Applicant's arguments, the examiner has provided and continues to provide the suggestion, reasoning and motivation to combine and modify the references. Kronenthal et al. would not lead one of ordinary skill in the art away from a combination of monomers. In fact, the inventors in both the Clark et al. reference and EP'623 cite to Kronenthal in their disclosures as disclosing suitable cyanoacrylates that can be used in their invention. As such, the Applicant has no basis for concluding that Kronenthal would teach away from the claimed invention. Again, there is no requirement that Hammerslag specifically teach the use of a cyanoacrylate as the modifying substance. As indicated above, it would have been well within the skill of one of ordinary skill in the art to view Hammerslag in view of the other art and come to that conclusion despite the absence of a specific teaching in Hammerslag as to the use of another cyanoacrylate as the modifying substance. As indicated above, it is immaterial that EP'623 contains a claim that contains a different mixture of cyanoacrylate monomers.

Examples and preferred embodiments do not teach away from the broad disclosure. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred



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embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989).

Contrary to Applicant's arguments, the examiner has provided the motivation to select that combination of monomers and initiator or accelerator comprising a quaternary amine in that the prior art discloses, as indicated above, that one of ordinary skill in the art may readily select a polymerization initiator as desired without undue experimentation. The Applicant's citation to *Principles of Polymerization* does not overcome the rejection. There is nothing in said reference which indicates that the polymerization of cyanoacrylate monomers with cyanoacrylate monomers are problematic or that one of ordinary skill in the art would not be able to combine different cyanoacrylate monomers with initiators without undue experimentation. The Applicant's conclusion that said reference indicates that the effect of initiators may be unpredictable is not sufficient to overcome the statement made in the art that initiators can be selected without undue experimentation. Obviousness does not require absolute predictability.

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

Claims 74-93, 95-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (US Pat. 5,981,621) in view of Kronenthal et al. (US Pat. 3,995,641), Hammerslag (US Pat. 6,386,203) and EP 0 965 623, in further view of Banitt et al. (US Pat. 3,559,652) and Collins et al.

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Clark et al. (US Pat. 5,981,621), Kronenthal et al. (US Pat. 3,995,641), Hammerslag (US Pat. 6,386,203) and EP 0 965 623 are cited for the same reasons as above and are incorporated herein to avoid repetition.

Banitt et al. teaches that alkoxyalkyl 2-cyanoacrylates are biodegradable and have minimal toxicity (Column 1, lines 70-75, Column 2). It is disclosed that compared with alkyl 2-cyanoacrylates (1.2%, 9%), with the exception of methyl 2-cyanoacrylate (100% in 75 days), alkoxyalkyl 2-cyanoacrylates (34% , 54.7%, 92.3%, 100% in 16 weeks) have a substantially higher rate of absorption by living tissue (Column 6, lines 45-75, Column 7, lines 1-10).

Collins et al. teach that the longer chained alkyl cyanoacrylates, such as octyl 2-cyanoacrylate, are more effective tissue adhesives and hemostasis-inducing agents than the lower homologues because of their faster polymerization rate in blood, however, the higher homologues do not biodegrade as rapidly. (Pgs. 428, 429, 431). It is taught that the salutary combination of effectiveness in hemostasis inducing ability of the higher homologues and rapid biodegradation of the methyl monomer would be highly desirable in a tissue adhesive (Pgs. 431, 432).

The prior art discloses a composition comprising at least two different monomers which form a medically acceptable polymer, at least one plasticizer, a mixture of anionic and radical stabilizers, such as sulfur dioxide, hydroquinone, p-methoxyphenol and butylated hydroxyanisole, a polymerization initiator, such as benzalkonium chloride. The difference between the prior art and the claimed invention is that the prior art does not expressly disclose a composition or film having a first monomer, which includes alkyl ester cyanoacrylate, and a different second monomer where the absorption rate of the first monomer species is different

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from the absorption rate of the second monomer species. However, the prior art amply suggests the same as the prior art discloses the combination of different monomers in forming medical adhesives. Further, it would have been well within the skill of and one of ordinary skill in the art would have been motivated to combine an alkyl ester cyanoacrylate with higher alkyl cyanoacrylate, such as octyl 2-cyanoacrylate, with the expectation that the composition would be suitable for use as a tissue adhesive and hemostasis-inducing agent, or with an alkyl ether cyanoacrylate with the expectation that the composition would have low toxicity, and in each case, with the expectation that the biodegradation rate could be adjusted readily by modifying the ratio of the monomers. Further, one of ordinary skill in the art would have been motivated to combine sulfur dioxide and sulfuric acid with radical stabilizers such as hydroquinone, p-methoxyphenol and butylated hydroxyanisole with the expectation that the composition would be more stable. Finally, one of ordinary skill in the art would have been motivated to use benzalkonium chloride with the expectation that it would act as a polymerization initiator.

Examiner has duly considered Applicant's arguments but deems them unpersuasive, for the reasons above and the further reasons below. As indicated above, Applicant cannot simply look at the individual teachings of the prior art in seclusion and then conclude that the prior art individually and as a whole would not suggest the claimed invention or motivate one of ordinary skill in the art to combine and modify the references. The applicant appears to argue that one of ordinary skill in the art is lacking a modicum of skill in logic and scientific reasoning, i.e. if the prior art does not explicitly disclose a conclusion then one of ordinary skill in the art is without the wherewithal to arrive at the conclusion using logic and scientific reasoning based on the

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express disclosure and any inferences thereof that may reasonably be gleaned from said express disclosure.

The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In *re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In *re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See also In *re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (setting forth test for implicit teachings); In *re Eli Lilly & Co.*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) (discussion of reliance on legal precedent); In *re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings) and *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) (reliance on logic and sound scientific reasoning). As such, as indicated above, one of ordinary skill in the art would conclude based on the express disclosure in the art as well as inferences that may be gleaned from said express disclosure to conclude that the combined teachings of the prior art do suggest the combination of cyanoarylate monomers, initiators and the claimed reason for using said combination of monomers. *Collins et al.* does not support the argument that one of ordinary skill in the art would have not known that single monomers could be combined to form a polymer. The Applicant's conclusion as to the effect of said disclosure is misplaced. *Collins et al.* is simply making an observation that polymerization in water is different from polymerization in water. *Collins et al.* does not state that polymerization does not occur only that the rates are different, as such, *Collins et al.* does not support Applicant's position that one of ordinary skill in

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the art would not know that cyanoacrylate monomer can be combined. The Applicant refers to unknown factors, however, obviousness does not require absolute predictability. The Applicant fails to provide any evidence that one of ordinary skill in the art would not be able to account for the differences between water and blood.

Claims 74-93, 95-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al. (US Pat. 5,998,472) in view of Kronenthal et al. (US Pat. 3,995,641), Hammerslag (US Pat. 6,386,203) and Clark et al. (US Pat. 5,981,621).

Berger et al discloses the mixture of reactive C1 to C8 cyanoacrylate ester monomer and a C10-C12 cyanoacrylate monomer to provide enhanced flexibility of the polymer film (Column 3, lines 1-54). It is disclosed that the term "C1 to C8 alkyl cyanoacrylate compositions" refers to polymerizable formulations comprising polymerizable cyanoacrylate ester monomers (Column 4, lines 60-68). It is disclosed that polymerizable cyanoacrylate ester monomers are known in the art and are described in US Pat. No. 3,995,641 to Kronenthal et al. (Column 1, lines 30, 31, Column 5, lines 31-44).

Kronenthal et al. (US Pat. 3,995,641), Hammerslag (US Pat. 6,386,203) and Clark et al. (US Pat. 5,981,621) are cited for the same reasons as above and are incorporated herein to avoid repetition.

The prior art discloses a composition comprising at least two different monomers which form a medically acceptable polymer, at least one plasticizer, a mixture of anionic and radical stabilizers, such as sulfur dioxide, hydroquinone, p-methoxyphenol and butylated hydroxyanisole, a polymerization initiator, such as benzalkonium chloride. The difference between the prior art and the claimed invention is that the prior art does not expressly disclose

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combination of alkyl ester cyanoacrylate and other monomer based on difference in biodegradation rate. However, the prior art amply suggests the same as the prior art discloses the combination of different monomers in forming medical adhesives. Further, it would have been well within the skill of and one of ordinary skill in the art would have been motivated to combine an alkyl ester cyanoacrylate with a different cyanoacrylate, such as an C10-C12 alkyl cyanoacrylate, with the expectation that biodegradation of the composition could be adjusted readily by modifying the ratio of the monomers, that the composition would exhibit a low degree of inflammatory response and that the polymerized film would exhibit flexibility. Finally, one of ordinary skill in the art would have been motivated to use benzalkonium chloride with the expectation that it would act as a polymerization initiator.

Examiner has duly considered Applicant's arguments but deems them unpersuasive for the same reasons as above and the further reasons below. As indicated above, it is immaterial that Berger et al. does not disclose all of the elements of the claim as the rejection is based on the combined teachings of the prior art. Contrary to the Applicant's arguments said combined teachings would suggest the claimed invention as indicated above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a compressed schedule and may be reached Monday, Tuesday, Thursday, Friday, 6:00 am – 4:30 pm (EST).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Dr. Johann Richter, can be reached at (571)272-0646. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

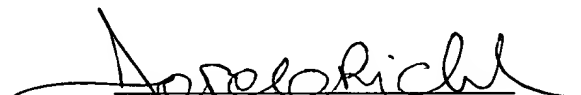
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank Choi

Patent Examiner

Technology Center 1600

October 12, 2006



Johann Richter, Ph. D. Esq.  
Supervisory Patent Examiner  
Technology Center 1600